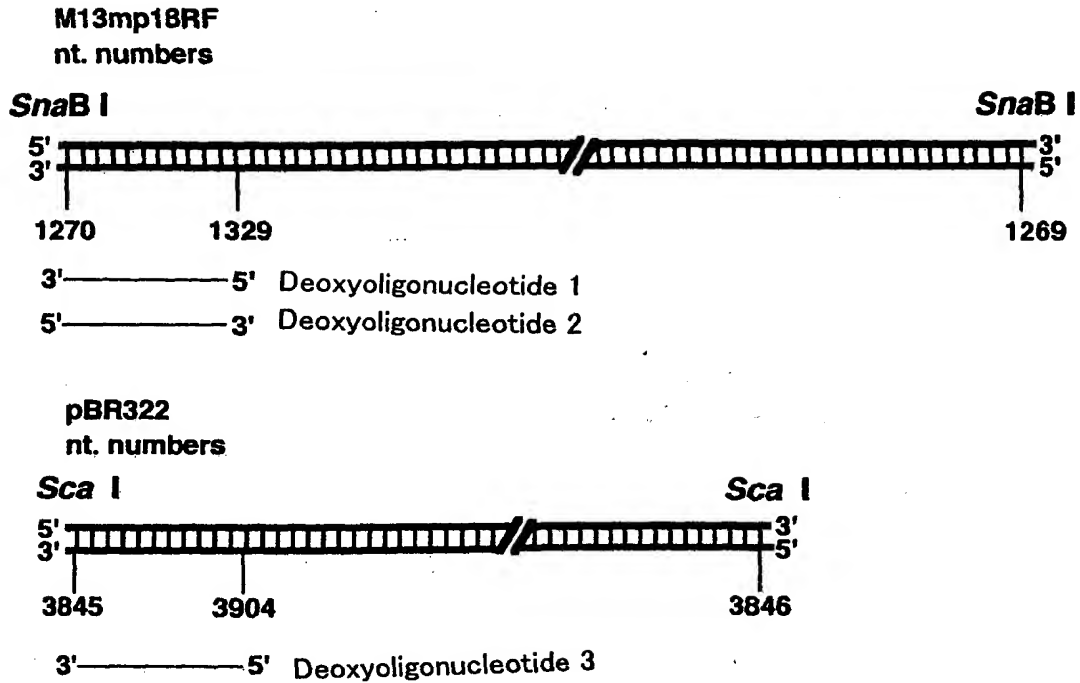
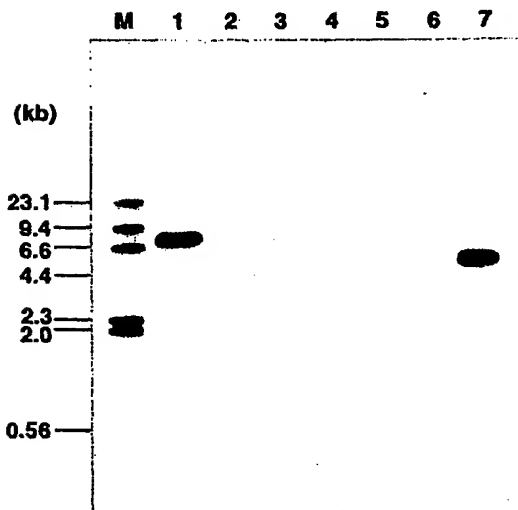


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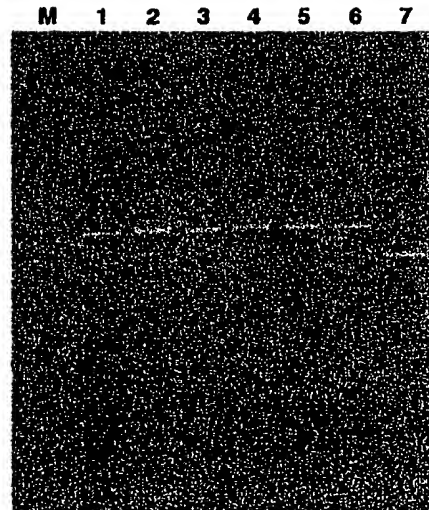
Figure 1



A



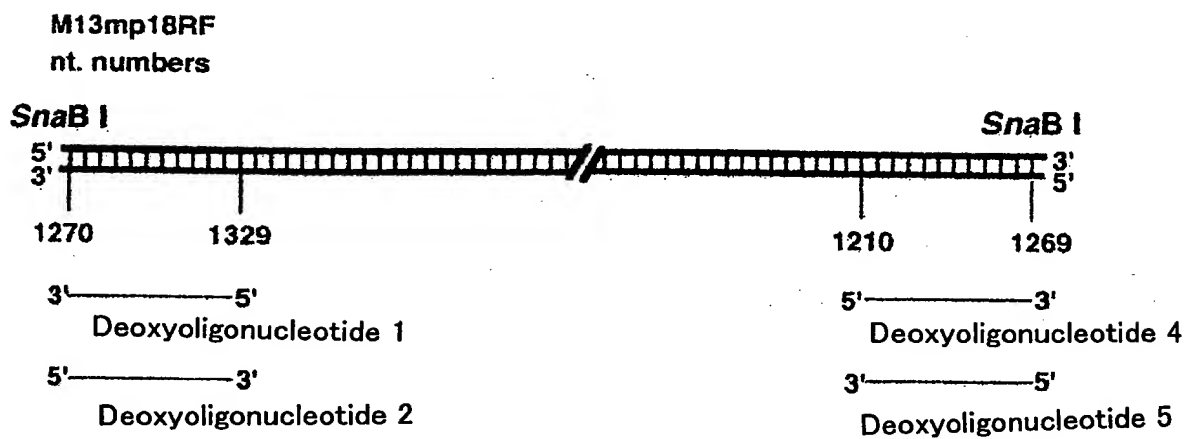
B



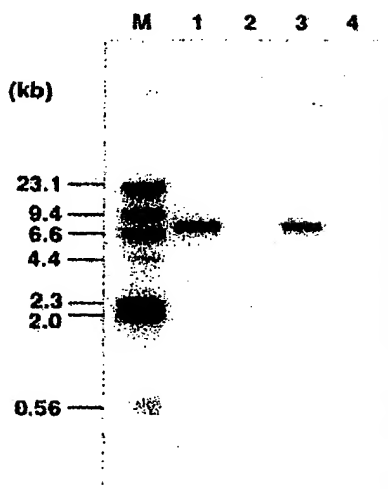
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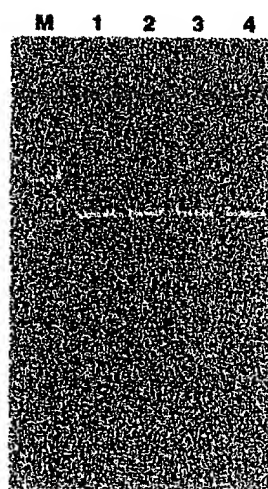
Figure 2



A



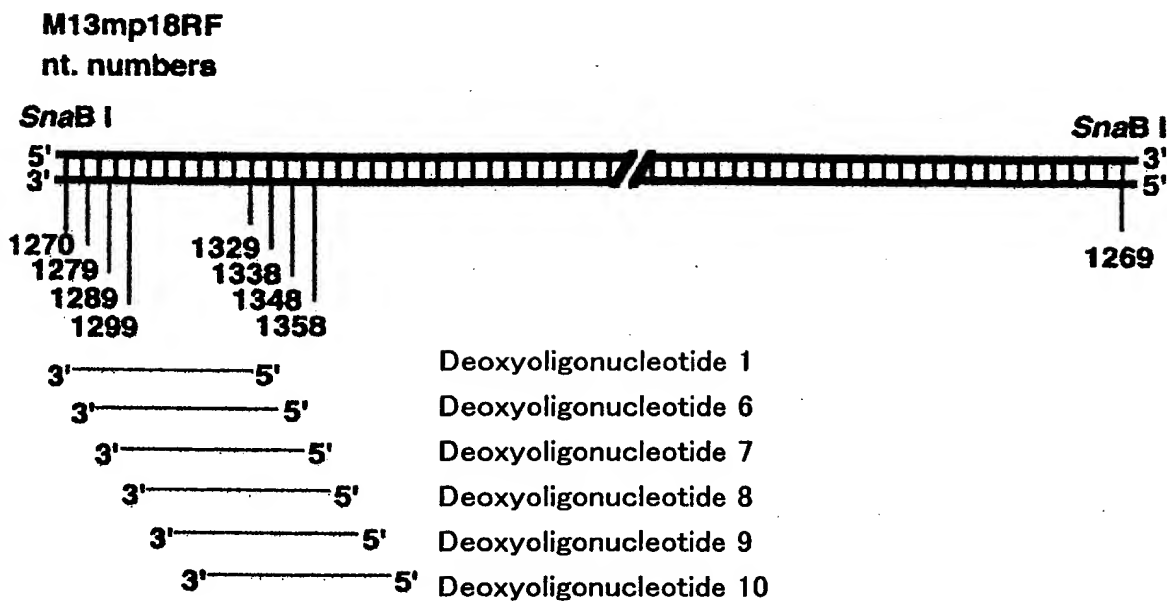
B



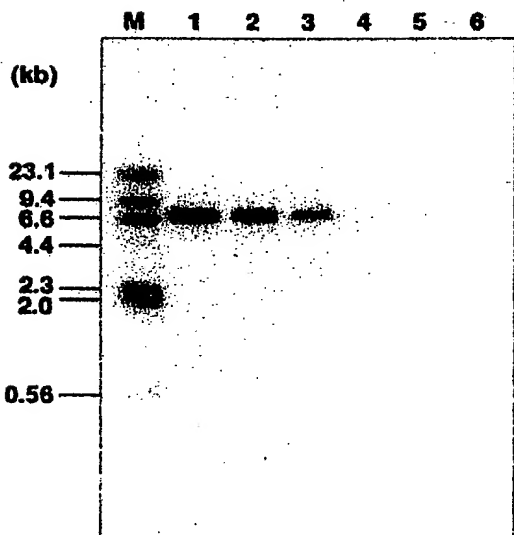
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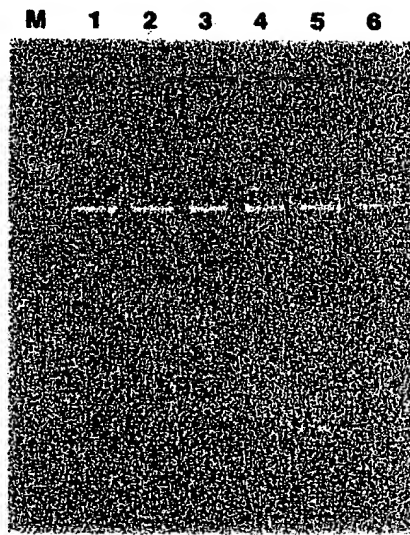
Figure 3



A



B

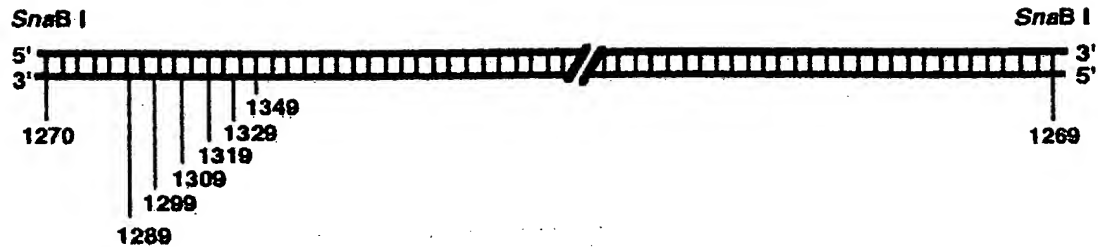


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Figure 4

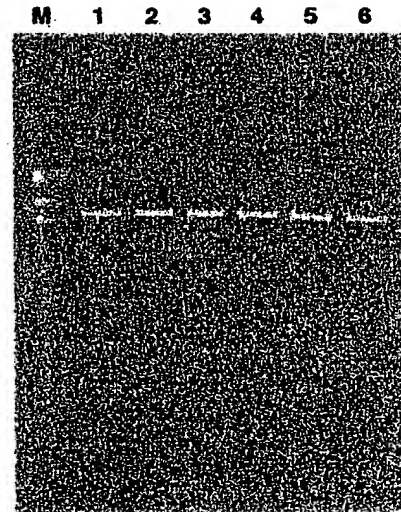
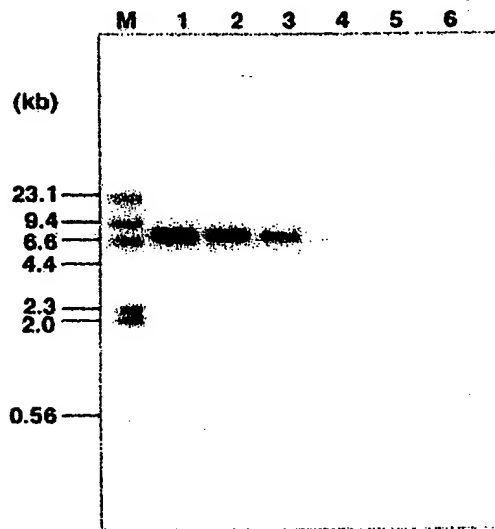
M13mp18RF nt.
 numbers



- 3'-----5' Deoxyoligonucleotide 11
- 3'-----5' Deoxyoligonucleotide 1
- 3'-----5' Deoxyoligonucleotide 12
- 3'-----5' Deoxyoligonucleotide 13
- 3'-----5' Deoxyoligonucleotide 14
- 3'-----5' Deoxyoligonucleotide 15

A

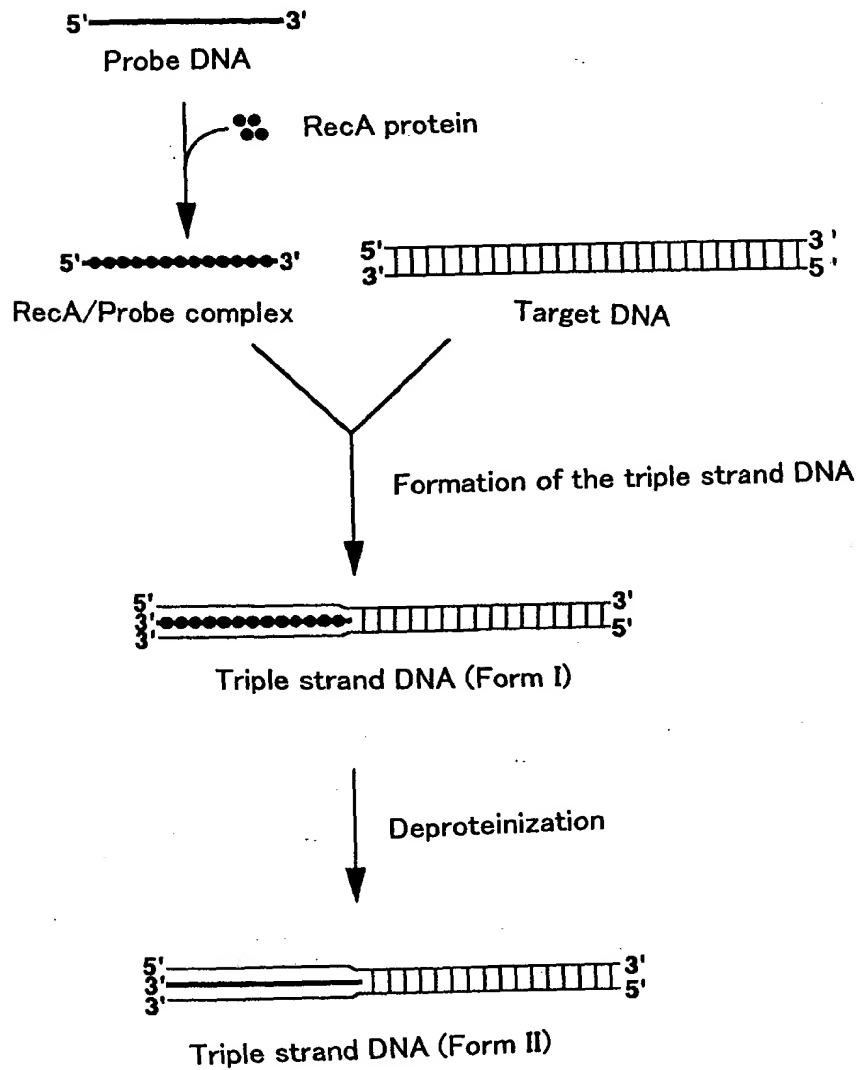
B



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Figure 5

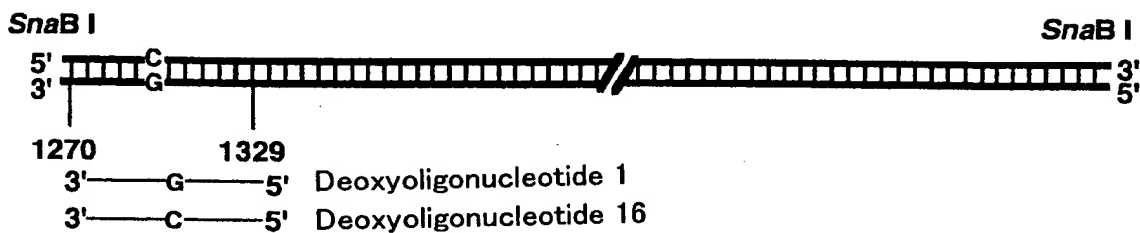


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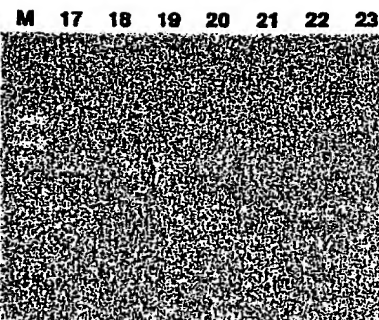
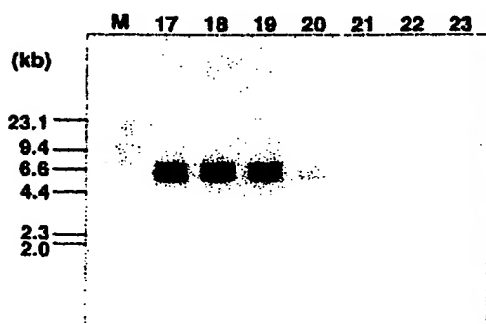
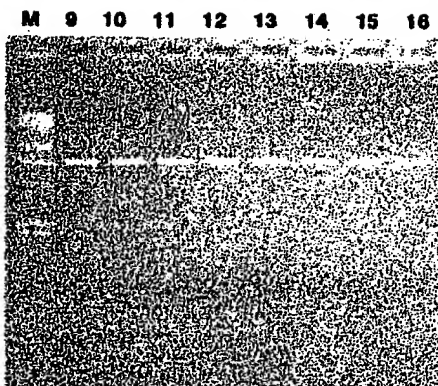
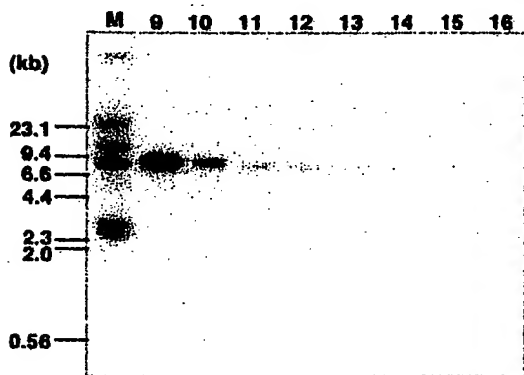
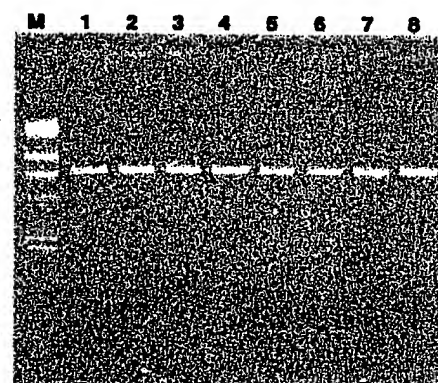
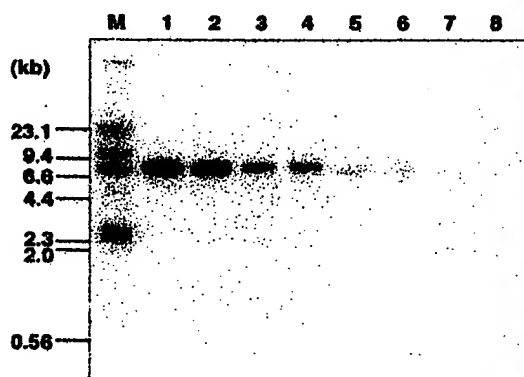
Figure 6

M13mp18RF
 nt. numbers



A

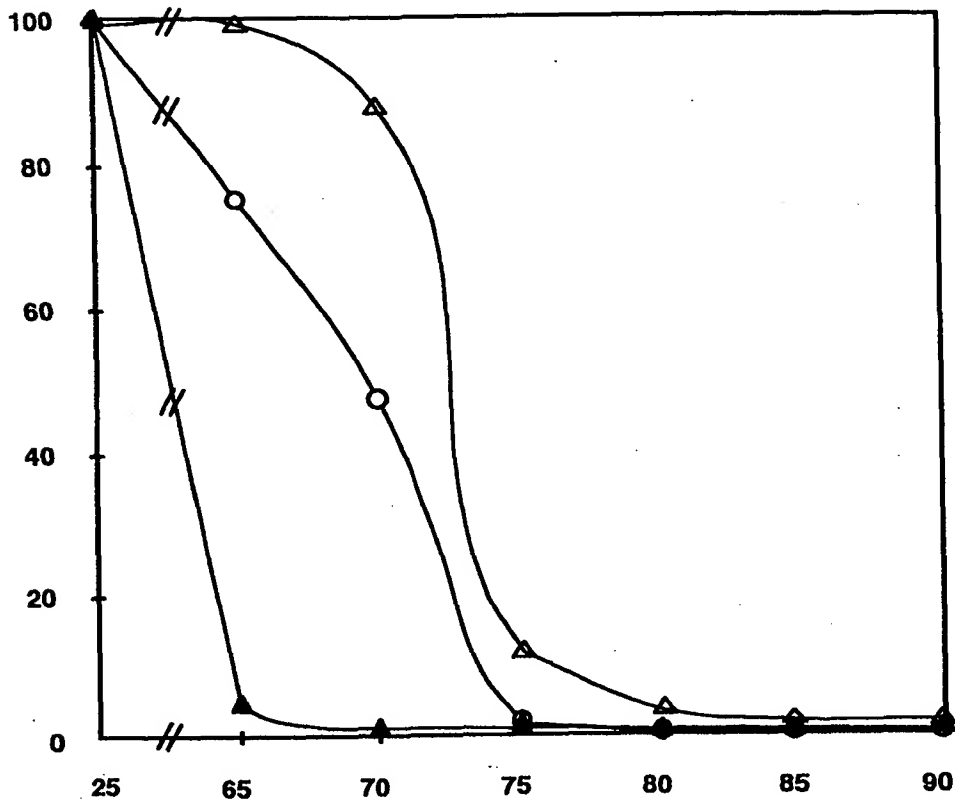
B



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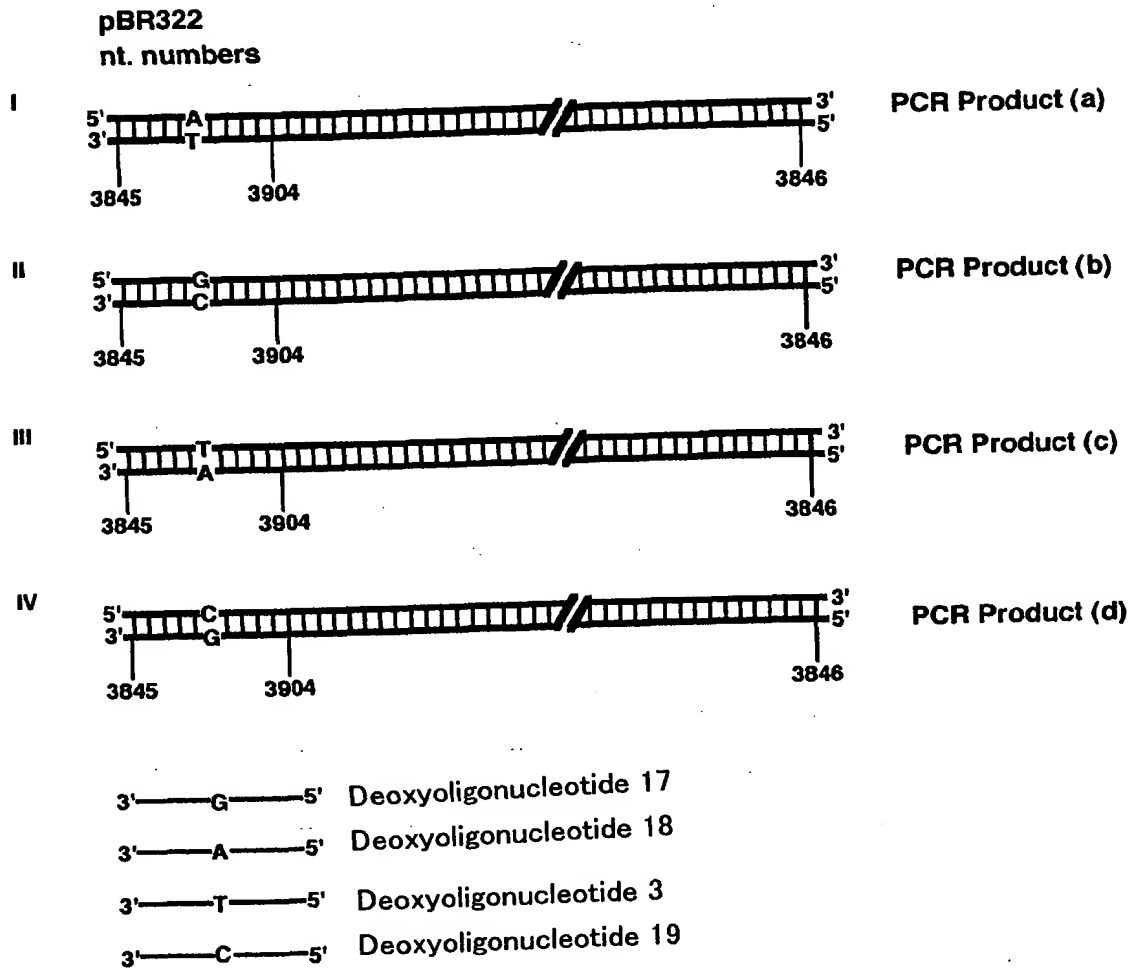
Figure 7



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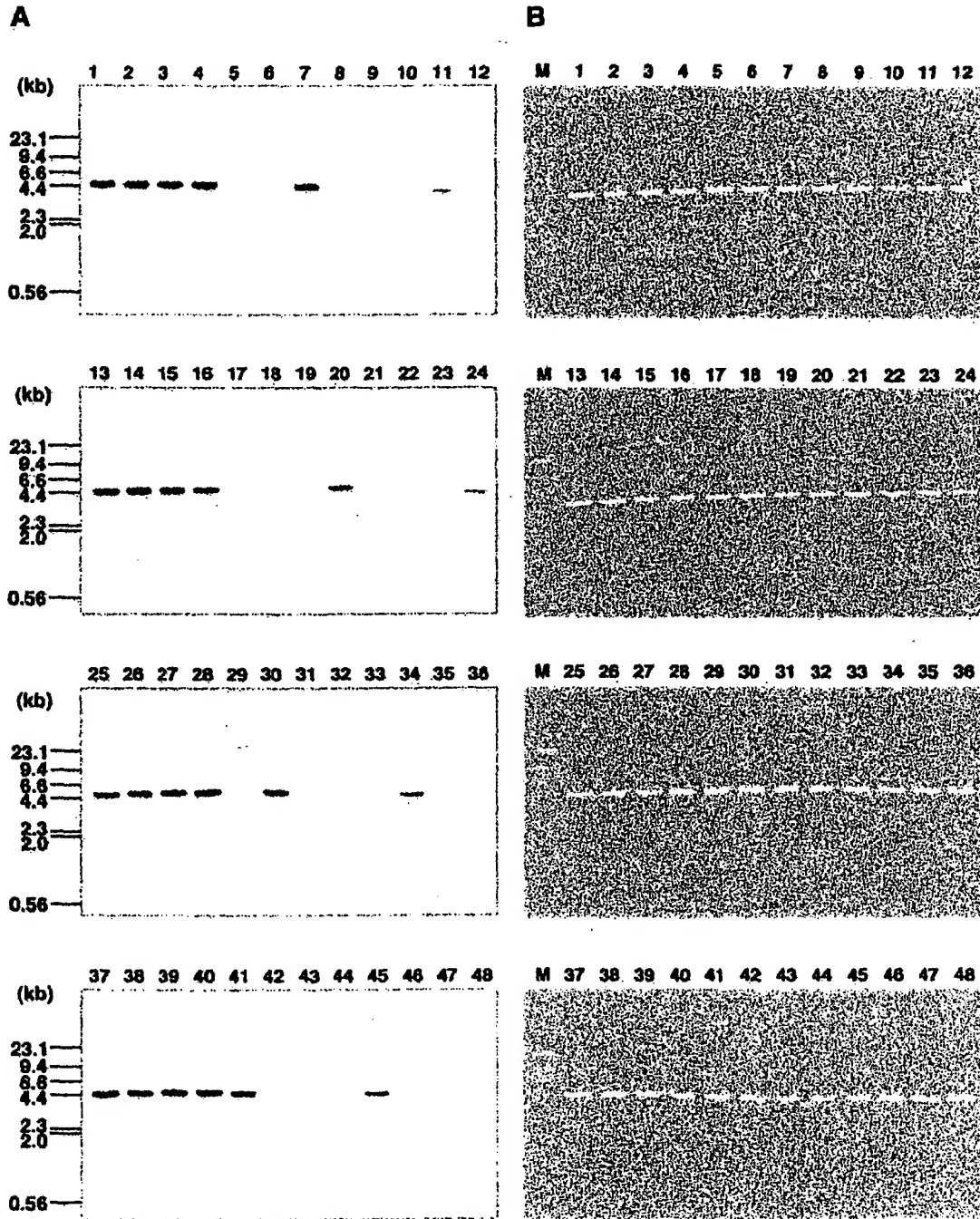
Figure 8



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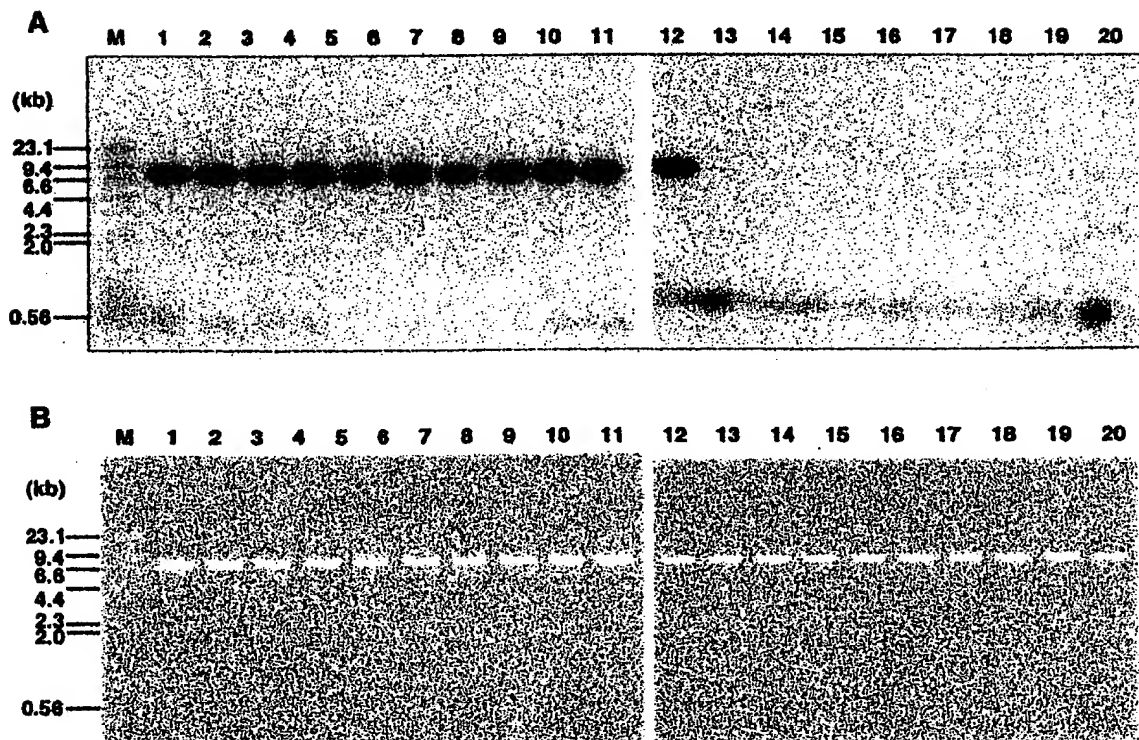
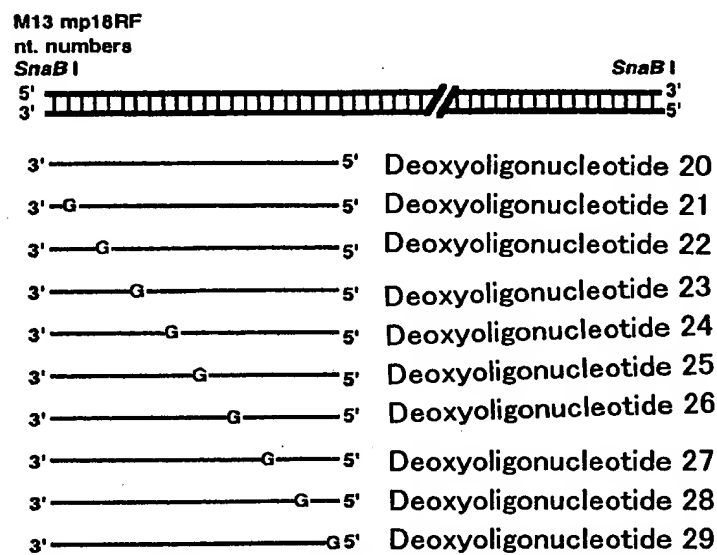
Figure 9



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Figure 10



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The diagram illustrates a three-step process for detecting a specific target sequence using a probe and RecA protein.

(A) Formation of the triple strand DNA: A probe (5'-G-3') binds to RecA protein, which then binds to a target sequence (5'-C-3') on Target 1, forming a triple-stranded DNA complex. Similarly, the probe binds to RecA protein, which then binds to a target sequence (5'-A-3') on Target 2, forming a triple-stranded DNA complex.

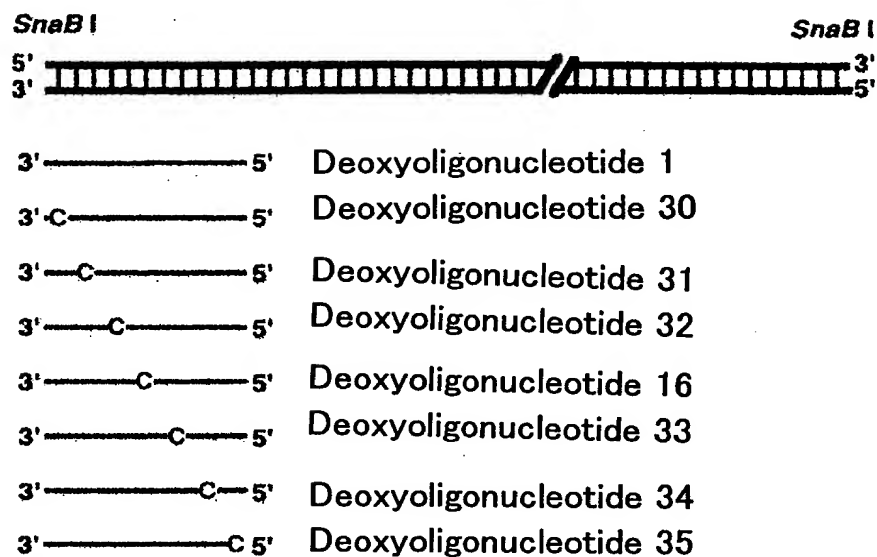
(B) Deproteinization: The triple-stranded DNA complex is treated with deproteinization, resulting in the dissociation of the RecA protein from the target sequence, leaving the probe bound to the target sequence.

(C) Heat treatment: The probe-target complex is subjected to heat treatment, which causes the probe to dissociate from the target sequence, leaving the target sequence intact.

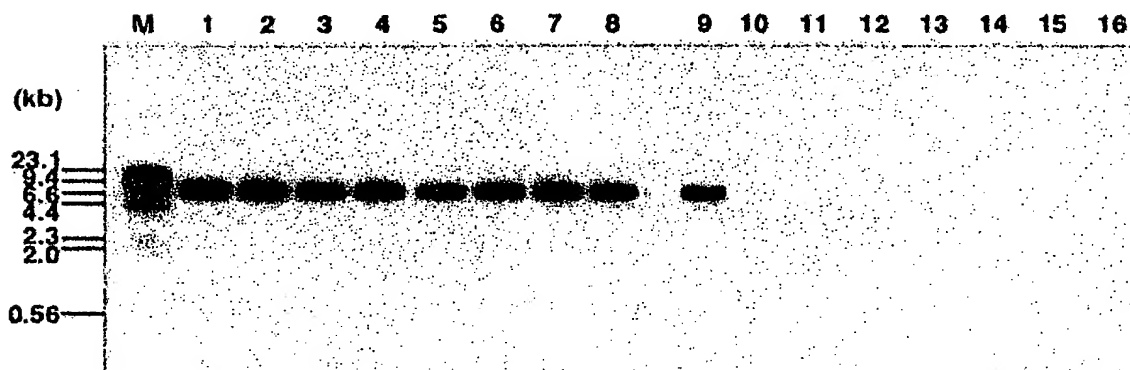
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Figure 12

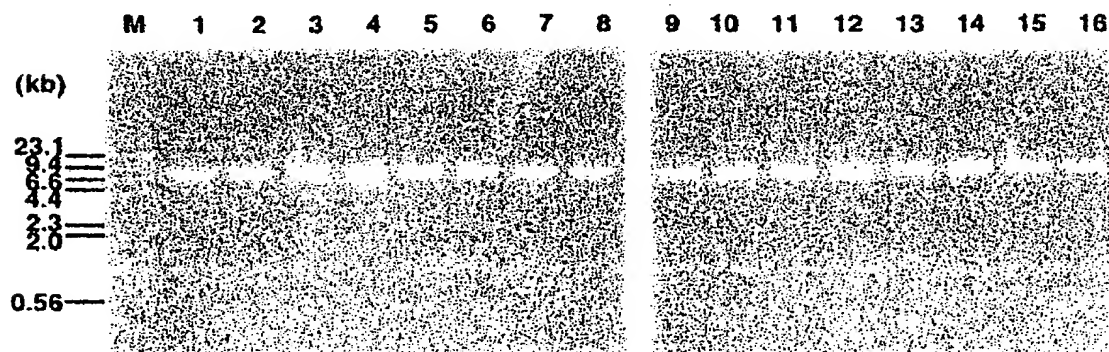
M13 mp18RF
 nt. numbers



A



B



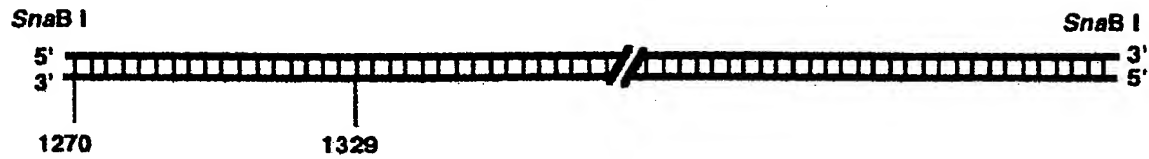
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Figure 13

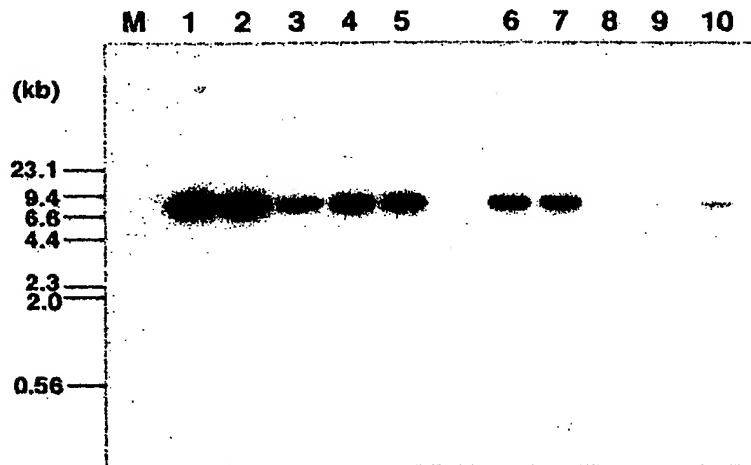
M13mp18RF

nt. numbers

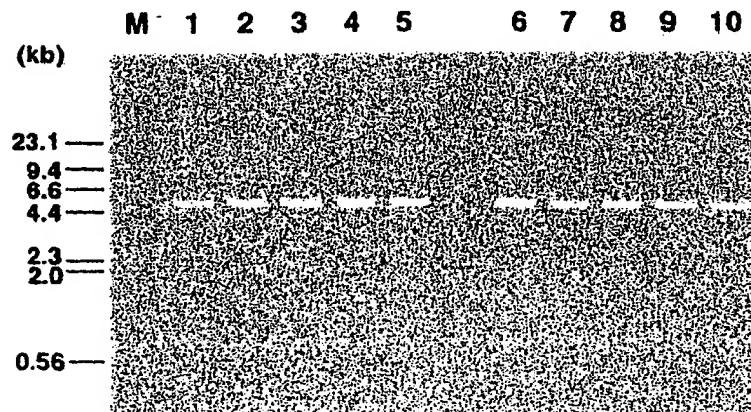


- 3'—G—5' Deoxyoligonucleotide 1
- 3'—(C)—5' Deoxyoligonucleotide 36
- 3'—C—5' Deoxyoligonucleotide 16
- 3'—C—5' Deoxyoligonucleotide 37

A



B



05989526-112101